NATIONAL PHOTOGRAPHIC
INTERPRETATION CENTER

LENS/FILM RESOLVING POWER

RESOLVING POWER TEST

1. MOVE FILM PARALLEL TO THE OPTICAL AXIS TO DETERMINE PLANE OF BEST DEFINITION

2. LENS IS TESTED AT ANGULAR DISTANCES OUT FROM THE OPTICAL AXIS

3. RADIAL RESOLUTION = $R = \dfrac{(FL)\,(LPMT)\,\cos^2\theta}{FC}$

TANGENTIAL RESOLUTION = $T = \dfrac{(FL)\,(LPMT)\,\cos\theta}{FC}$

FL = EFFECTIVE FOCAL LENGTH OF THE LENS
LPMT = LINES PER MILLIMETER OF THE TARGET
FC = EFFECTIVE FOCAL LENGTH OF THE COLLIMATOR
θ = FIELD ANGLE

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CONFIDENTIAL

CLASSIFICATION

TSSG / APSD

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